REH

Analysis Required: Water Quality Analysis

Total Dissolved Solids

17 CAM METALS

BTEX = Benzene, Toluene, ethylbenzene , and xylenes

TPH-8015

PAH = Polynuclear aromatic hydrocarbons

Radionuclides- Table 64442 =

- Gross Alpha EPA 900.0 1L Poly non-preserved
- Radium 226/228 1L Poly non-preserved
- Uranium total EPA 6020 1 250mL HNO3 Poly

Geochemical Analysis

Nitrate

Lithium

Strontium

Manganese

California Water Boards

Edmund G. Brown Jr.
Governor

Matthew Rodriquez
Secretary for
Environmental Protection

Central Valley Regional Water Quality Control Board

21 April 2015

Darin Jeffries
General Production Services
1333 Kern Street
Taft, CA 93268

CERTIFIED MAIL
7014 1200 0000 3347 7135

CALIFORNIA WATER CODE DIRECTIVE PURSUANT TO SECTION 13267. You are legally obligated to respond to this Order. Please read this Order carefully.

General Production Services (hereafter Discharger) has been identified as the owner or operator of petroleum production wastewater disposal ponds (ponds). A list of the ponds (and the leases and oil fields where they are located) that the California Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) identifies as under your control is presented in Attachment A. Ponds for the disposal of wastewater generated during the course of petroleum production have the potential to affect the quality of groundwater (a water of the State). Groundwater underlying the areas where your ponds are located have beneficial uses as identified in the Water Quality Control Plan for the Tulare Lake Basin (Basin Plan).

This order requires the collection and analysis of wastewater samples collected from each of the ponds listed in Attachment A to characterize the discharge. Each sample is to be analyzed for each of the constituents listed in Attachment B. These data are needed to comprehensively characterize wastewater in each pond and provide data needed to evaluate the threat to the quality of waters of the State. If more than one pond is connected in series (i.e., one pond drains directly to the next with no other source of inflow) then only the upstream pond must be sampled. This order is not intended to require the collection of duplicative data. If during the 12 months (one year) prior to the date of this order, samples required by this order have been analyzed from one or more of the ponds for the required constituents, that data can be submitted for the appropriate order requirements.

This order also requires Discharger to identify any discharge(s) of oil field wastewater to land that is not identified in Attachment A. Discharger must also collect and analyze wastewater samples in accordance with Attachment B from any additionally identified discharge to characterize the discharge.

The Central Valley Water Board's authority to require technical reports derives from Section 13267 of the California Water Code, which specifies, in part, that:

(a) A regional Board ... in connection with any action relating to any plan or requirement authorized by this division, may investigate the quality of any waters of the State within its region.

(b)(1) In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefit to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.

The Central Valley Water Board is concerned about the potential impacts to water quality posed by the discharge of oil field produced waters in surface ponds. The technical information and reports required by this order are necessary to assess the potential threat to water quality. The need to understand the potential impacts to water quality justify the need for the information and reports required by this order. Based on the nature and possible consequences of the discharges of waste, the burden of providing the required information, including the reporting costs, bears a reasonable relationship to the need for the report, and the benefits to be obtained. Discharger is required to submit this information and reports because it is the operator of the ponds listed in Attachment A of this order.

The unauthorized discharge of waste containing oil field waste constituents to land, including unlined ponds, may result in the degradation of water quality and creates or threatens to create, a condition of pollution in groundwater. Significant concentrations of salinity (measured as TDS and EC), significant contributors to salinity such as chloride and sulfate, and boron are present in oil field wastewater. Other potential constituents such as, but not limited to, metals, radionuclides, and organic compounds pose a threat to water quality. The concentrations of these waste constituents in wastewater being discharged needs to be known to evaluate the threat. In addition, all locations where these discharges are occurring needs to be known.

Underlying groundwater can be degraded if mixed with oil field wastewater. Elevated concentrations of oil field waste constituents could impair the groundwater for municipal and domestic supply and agricultural supply uses.

Under the prescribed authority of California Water Code section 13267, the Central Valley Water Board directs Discharger to:

1. **By 7 July 2015**, submit a technical report containing the following information:

   A. Identification of any discharges of oil field produced waters to land, including but not limited to ponds, since April of 2014 that are not listed in Attachment A;

   B. Collect representative samples of wastewater within each of the ponds. Samples must be analyzed in accordance with the water quality analysis and reporting requirements contained in Attachment B to this Order;[1]

      If a representative sample cannot feasibly be collected from one or more of the sources discharging to a surface impoundment(s), then a comment will need to be added to the technical report required by this Order demonstrating that collection of a representative sample from a specific source is not feasible within the required timeframe, and propose an alternative sampling procedure and expeditious time schedule for obtaining a representative sample for each source. Alternative sampling procedures and time schedules are subject to approval by the Assistant Executive Officer of the Central Valley Regional Water Quality Control Board.

   C. All available information for each of the surface impoundment(s), including dimensions (i.e., length, width, and depth), latitude and longitude, Assessor's Parcel Numbers of the lease, duration of the discharge (in months), and the volume of wastewater discharged per year.

   D. A location map that includes the following information:

      i. All surface impoundment(s) at the Facility,
      ii. Include the boundary lines for all leases at the Facility, and
      iii. Legend with the name of the surface impoundment(s).

2. **By 6 May 2015**, Discharger needs to contact Dane S. Johnson of this office at (559) 445-5525 if you have received this Order and cannot collect the required samples.

[1] All previously obtained analytical data for oil field produced wastewater samples collected at the Facility, if any, with a description of the source and location for each analysis may be submitted in the alternative for re-running tests if the sample(s) was collected and analyzed within 12 months (one year) of the date of this order.

The technical report required by this Order must be submitted to the attention of:

Ronald Holcomb
Central Valley Water Board
1685 E Street
Fresno, CA 93706

Based on the information submitted in the technical report, additional information or action may be required.

With the report required by this Order, Discharger shall provide under penalty of perjury under the laws of California a "Certification" statement to the Central Valley Water Board. The "Certification" shall include the following signed statement:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

The Central Valley Water Board reserves the right to issue a Notice of Violation or pursue enforcement for Discharger's activities after reviewing the documentation provided in response to this Order.

The Technical Report is to be signed and stamped by a California Professional Engineer (Registered as a Civil Engineer) or a registered California Professional Geologist. Any laboratory analyses shall be performed by an analytical laboratory certified by the State of California for the analyses performed. Submissions pursuant to this Order shall include a statement by Discharger, or an authorized representative of Discharger, certifying (as described above) that the information submitted is true, complete, and accurate.

The failure to furnish the required report, or the submission of a substantially incomplete report or false information, is a misdemeanor, and may result in additional enforcement actions being taken against Discharger, including issuance of an Administrative Civil Liability Complaint pursuant to California Water Code section 13268. Liability may be imposed pursuant to California Water Code section 13268 in an amount not to exceed one thousand dollars ($1,000) for each day in which the violation occurs. All discharges to unpermitted ponds should cease pending review and submission of the technical information sought by this order.

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Resources Control Board (State Water Board) to review the action in accordance with

ATTACHMENT A

The following table contains the names of oil fields and lease(s) and the corresponding number of ponds that the Central Valley Water Board has identified as active and under your control:

OPERATOR	OIL FIELD	LEASE	NO. OF PONDS
General Production Service	Lost Hills	Galbreath	1

ATTACHMENT B

Water Quality Analysis

Wastewater samples collected from the ponds shall be analyzed by a laboratory certified by the Environmental Laboratory Accreditation Program using currently applicable United States Environmental Protection Agency-approved analytical methods for water for the following:

A. Total dissolved solids;

B. Metals listed in California Code of Regulations, title 22, section 66261.24. subdivision (a)(2)(A);

C. Benzene, toluene, ethylbenzene, and xylenes;

D. Total petroleum hydrocarbons as crude oil;

E. Polynuclear aromatic hydrocarbons (including acenaphthene, acenaphthylene, anthracene, benzo[a]anthracene, benzo[b]fluoranthene, benzo[a]pyrene, benzo[g,h,i]perylene, chrysene, dibenzo[a,h]anthracene, fluoranthene, fluorine, indeno[1,2,3-cd]pyrene, naphthalene, phenanthrene, and pyrene);

F. Radionuclides listed under California Code of Regulations, title 22, Table 64442;

G. Major and minor cations (including sodium, potassium, magnesium, and calcium);

H. Major and minor anions (including nitrate, chloride, sulfate, carbonate, bicarbonate, and bromide);

I. Trace elements (including lithium, strontium, boron, iron, and manganese).

Reporting Requirements

Water Quality information shall be submitted in a technical report that includes at a minimum:

A. Site plan(s) with the location(s) of where the samples were collected;

B. A description of how the samples, representative of the pond contents, were collected;

Table(s) of analytical results organized by pond number with the data also submitted electronically as an Excel spreadsheet.

Analysis Required: Water Quality Analysis

Total Dissolved Solids

17 CAM METALS

BTEX = Benzene, Toluene, ethylbenzene , and xylenes

TPH-8015

PAH = Polynuclear aromatic hydrocarbons

Radionuclides- Table 64442 =

- Gross Alpha EPA 900.0 1L Poly non-preserved
- Radium 226/228 1L Poly non-preserved
- Uranium total EPA 6020 1 250mL HNO3 Poly

Geochemical Analysis

Nitrate

Lithium

Strontium

Manganese

~Laboratory Report~

Characteristics of Hazardous Waste - Title 22, Article 3.

‡ Aqueous Samples

Rev. 6-23-06

Customer: General Production Services
Address: PO BOX 344
Taft, CA 93268
Attention: Darin Jeffries
Sample Description: Sump-WDR
Sample Matrix: L=LIQUID
Analytical Parameter: CAM Metals, as itemized in Title 22, § 66261.24,Table II (STLC,TTLC)

Log # : 28731
Sample Date: 4/27/15
Date Received: 4/27/15
Date Completed: 5/15/15
Date Reported: 5/15/15

Toxicity § 66261.24

Characteristic		*Results:*				
Constituent	*Symbol*	*Total (mg/L)*	*PQL (mg/L)*	*Method*	*STLC (mg/L)*	*TTLC (mg/Kg)*
Antimony	Sb	2.2	0.1	EPA 6010B	15	500
Arsenic	As	ND	0.5	EPA 6010B	5	500
Barium*	Ba	ND	0.01	EPA 6010B	100	10000
Beryllium	Be	0.04	0.01	EPA 6010B	0.75	75
Cadmium	Cd	ND	0.01	EPA 6010B	1	100
Chromium (Total)	Cr	0.04	0.01	EPA 6010B	560	2500
Chromium (VI)	Cr	NR	0.01	EPA 7196A	5	500
Cobalt	Co	0.15	0.01	EPA 6010B	80	8000
Copper	Cu	0.05	0.01	EPA 6010B	25	2500
Lead	Pb	1.7	0.1	EPA 6010B	5	1000
Mercury	Hg	ND	0.001	EPA 7470	0.2	20
Molybdenum**	Mo	ND	0.1	EPA 6010B	350	3500
Nickel	Ni	0.5	0.1	EPA 6010B	20	2000
Selenium	Se	ND	0.1	EPA 6010B	1	100
Silver	Ag	0.10	0.01	EPA 6010B	5	500
Thallium	Tl	ND	0.1	EPA 6010B	7	700
Vanadium	V	0.20	0.01	EPA 6010B	24	2400
Zinc	Zn	ND	0.1	EPA 6010B	250	5000

‡ Constituents for aqueous samples exceeding STLC values shall be considered a hazardous waste.

Notes:
~ STLC and TTLC values are calculated on the concentrations of the elements, not the compounds.
~ WET extraction may be required if Total mg/L results exceeds 10X STLC (solid matrix).
~ If Total mg/L for a liquid matrix exceed STLC mg/L values or Total mg/Kg for a solid matrix exceed TTLC values, the sample is considered hazardous.
* Excluding barite, Ba SO4.
** Excluding molybdenum disulfide, MoS2.
NR - Not Requested
ND - Not Detected (below PQL)
One or more state approved methods may be used in performing anaylsis depending upon sample matrix.
*** Subcontracted due to matrix of analysis

Initials: _____ **Date:** _____

AREA:

FREQUENCY

Midway Laboratory, Inc

CHAIN OF CUSTODY FORM

LOG NUMBER: 28729 (28 1/01)

PAGE: 1 OF 2

COMPANY: GPS Oil - Galbreath Lease

CONTACT(S):

CONTACT(S): Darin Jeffries

PHONE: 978-8753 CELL: FAX:

ADDRESS: PO Box 344

Taft CA 93268

EMAIL (S):

EMAIL (S):

SAMPLER:

SAMPLER SIGNATURE REQUIRED ABOVE

ANALYSIS REQUESTED

LAB #	SAMPLE DESCRIPTION	LOCATION / FACILITY	SAMPLE DATE	SAMPLE TIME	METER #	TPH 8015 GRO	BTEX 8021	TPH 8015 DRO	PAH's	Radioactivity	Enterobacteria	NUMBER OF CONTAINERS	TYPE OF CONTAINERS (SEE LIST)	SAMPLE MATRIX (SEE LIST)	PRESERVATIVES REQUIRED (SEE LIST)
	Sump - WDR		4-27-15			X	X	X	X	X	X	3	G	L	

PRESERVATIVE LIST

Please indicate preservative required using the corresponding letter at the left of the list

A	HCl - Hydrochloric Acid
B	H2SO4 - Sulfuric Acid
C	HNO3 - Nitric Acid
D	NaOH- Sodium Hydroxide
E	NA2S2O3 - Sodium Thiosulfate
F	Zn Acetate - Zinc Acetate :
G	O - Other (Please specify in comments)

TEMPERATURE		PRESSURE	
Temp	UOM	Pressure	UOM

SAMPLE CONDITION

AT TIME OF ARRIVAL IN THE LAB PLEASE CIRCLE THE APPROPRIATE BOXES BELOW:

SAME DAY SAMPLING

COOL

RECEIVED ON ICE

WARM

ROOM TEMPERATURE

PLEASE LIST ANY PM /PO NUMBERS OR COST CODES:

TEMPERATURE MUST BE TAKEN FOR ALL DRINKING WATER SAMPLES UPON ARRIVAL IN THE LAB THESE ARE TAKEN WITH THE TEMP GUN

TEMP

CONTAINER TYPES

G= GLASS
AG= AMBER GLASS
M= METAL
MC= METAL CYLINDER
P= PLASTIC
SY= SYRINGE
T= TEDLAR
TC= TEFLON COATED
O= OTHER

SAMPLE MATRIX

G= GAS
L= LIQUID
LNG= LIQUEFIED NATURAL GAS
LPG= LIQUEFIED PETROLEUM GAS
O= OIL
S= SOIL
SLD= SOLID
SL= SLUDGE
DW= DRINKING WATER
W= WATER

SAMPLING

Start Time:

Total Sample Time: HOURS

Total Mileage: MILES

CHAIN OF CUSTODY SIGNATURE RECORD

1. RELINQUISHED BY: DATE: 4/27/15 TIME: 12:18
RECEIVED BY:
RELINQUISHED BY: DATE: 4/27/15 TIME: 12:18
1. RECEIVED BY: DATE: TIME:

INSTRUCTIONS FOR OUTLABBING ANALYSIS:

ALL outlabbed analysis must include the method numbers for requested analysis.

ALL drinking water samples must include: Source Numbers Sample's Name

Laboratory must be aware that analysis is to be reported to the State.

COMMENTS:

IS SAMPLE A RESAMPLE? PLEASE STATE YES OF NO:

ORGINAL LOG NUMBER:

IS SAMPLE A REVISED PLEASE STATE YES OF NO:

THIS SPACE RESERVED FOR LABORATORY USE ONLY

APR 12:40

Midway Laboratory, Inc.

Alan J. Harris - President/Owner

Phone: 661-765-2364 ♦ Fax: 661-765-6920 ♦ Email: midwaylab@verizon.net ♦ State Certification Number: 1396 ♦ www.midwaylaboratory.com

AREA: _____

FREQUENCY

Midway Laboratory, Inc
CHAIN OF CUSTODY FORM

28731

LOG NUMBER: 28729 RW

PAGE: 2 OF 2

COMPANY: Gen Prod Service
CONTACT(S): Daria Jeffries
PHONE: _____ CELL: _____ FAX: _____
ADDRESS: PO Box 344
Taft CA 93268
EMAIL (S): _____
EMAIL (S): _____
SAMPLER: X Client
SAMPLER SIGNATURE REQUIRED ABOVE

ANALYSIS REQUESTED

LAB #	SAMPLE DESCRIPTION	LOCATION FACILITY	SAMPLE DATE	SAMPLE TIME	METER #	Nitrate	Lithium	Strontium	Manganese	NUMBER OF CONTAINERS	TYPE OF CONTAINERS (SEE LIST)	SAMPLE MATRIX (SEE LIST)	PRESERVATIVES REQUIRED (SEE LIST)	TEMP
	Sump - WDR		4-27-15			X	X	X	X	1	G	L		

PRESERVATIVE LIST
Please indicate preservative required using the corresponding letter at the left of the list

A	HCl - Hydrochloric Acid
B	H2SO4 - Sulfuric Acid
C	HNO3 - Nitric Acid
D	NaOH - Sodium Hydroxide
E	NA2S2O3 - Sodium Thiosulfate
F	Zn Acetate - Zinc Acetate
G	O - Other (Please specify in comments)

TEMPERATURE		PRESSURE	
Temp	UOM	Pressure	UOM

SAMPLE CONDITION
AT TIME OF ARRIVAL IN THE LAB
PLEASE CIRCLE THE APPROPRIATE BOXES BELOW:
SAME DAY SAMPLING
COOL
RECEIVED ON ICE
WARM
ROOM TEMPERATURE

PLEASE LIST ANY PM /PO NUMBERS OR COST CODES:

TEMPERATURE MUST BE TAKEN FOR ALL DRINKING WATER SAMPLES UPON ARRIVAL IN THE LAB
THESE ARE TAKEN WITH THE TEMP GUN

CONTAINER TYPES
G= GLASS
AG= AMBER GLASS
M= METAL
MC= METAL CYLINDER
P= PLASTIC
SY= SYRINGE
T= TEDLAR
TC= TEFLON COATED
O= OTHER

SAMPLE MATRIX
G= GAS
L= LIQUID
LNG= LIQUEFIED NATURAL GAS
LPG= LIQUEFIED PETROLEUM GAS
O= OIL
S= SOIL
SLD= SOLID
SL= SLUDGE
DW= DRINKING WATER
W= WATER

SAMPLING
Start Time: _____
Total Sample Time: HOURS
Total Mileage: MILES

CHAIN OF CUSTODY SIGNATURE RECORD

1.	See first Page	4-27-15	1218
	RELINQUISHED BY	DATE	TIME
1.			
	RECEIVED BY	DATE	TIME
1.			
	RELINQUISHED BY	DATE	TIME
1.			
	RECEIVED BY	DATE	TIME

INSTRUCTIONS FOR OUTLABBING ANALYSIS:
- ALL outlabbed analysis must include the method numbers for requested analysis.
- ALL drinking water samples must include Source Numbers, Sample's Name.
- Laboratory must be aware that analysis is to be reported to the State.

IS SAMPLE A RESAMPLE?
PLEASE STATE YES OF NO:

ORGINAL LOG NUMBER:

IS SAMPLE A REVISED
PLEASE STATE YES OF NO:

COMMENTS:

THIS SPACE RESERVED FOR LABORATORY USE ONLY

Midway Laboratory, Inc.
Alan J. Harris - President/Owner
Phone: 661-765-2364 ♦ Fax: 661-765-6920 ♦ Email: midwaylab@verizon.net ♦ State Certification Number: 1396 ♦ www.midwaylaboratory.com

Laboratory Report

ELAP Cert. 1396A

Geo-Chemical Water Analysis

Rev 01-13-15

Customer: General Production Services
Address: P.O. Box 344
Taft, CA 93268
Attention: Darin Jeffries
Sample Description: **Sump-WDR**

Log # : 28731
Date In: 4/27/15
Date Completed: 5/12/15
Date Reported: 5/13/15

Anions	mg/L	meq/L	Method #.	MDL
Bicarbonate, HCO_3^{-1}	3,353 .	54.9	SM2320 B	0.20
Carbonate, CO_3^{-2}	0.00 .	0.00	SM2320 B	0.20
Chloride, Cl^{-1}	16,600 .	468	SM4500-Cl^{-1}	0.01
Hydroxide, OH^{-1}	0.00 .	0.00	SM2320 B	0.20
Sulfate, SO_4^{-2}	0.72 .	0.01	SM4500-$SO4^{-2}$	0.05

Calculations	Results	Units	Method #	MDL
Alkalinity, as CaCO3 (Total)	2,748	mg/l	SM 2320 B	NA
as CaCO3 (less Org. Alk.)	2,748	mg/l	SM 2320 B	NA
Hardness, as CaCO3 (Calc.)	916	mg/l	SM 2340 B	NA
Salinity, calc. Na+Cl	30,097	mg/l	(Calc.)	NA
Salinity, from Chlorosity	29,989	mg/l	(Calc.)	NA
Calcium Carbonate				
Stability Index (Langlier)	1.37	(Notes)	SM 2330 B	NA
Stability Index (Stiff Davis)	1.29	NA	Ref. 4	NA

Cations	mg/L	meq/L	Method #.	MDL
Barium, Ba^{+2}	13.8 .	0.20	EPA 200.7	0.01
Boron, B^{+3}	143 .	39.7	EPA 200.7	0.1
Calcium, Ca^{+2}	131 .	6.54	EPA 200.7	0.01
Iron, Fe^{+3}	6.37 .	0.34	EPA 200.7	0.01
Magnesium, Mg^{+2}	143 .	11.8	EPA 200.7	0.01
Potassium, K^{+1}	523 .	13.4	EPA 200.7	0.05
Sodium, Na^{+1}	10,500 .	457	EPA 200.7	5.00

Physical Data	Results		Method #	MDL
Temperature	68.0	°F	SM 2550 B	± 0.20
Conductivity (Measured)	42,000	µmho's	SM 2510 B	2.00
Resistivity	0.238	ohm's	(Calc.)	NA
Specific Gravity (60/60)	1.0210	units	API RP 45	±0.0001
Ionic strength	0.52	IS (µ)	(Calc.)	NA
pH	7.52	units	SM 4500 H B	± 0.01
Total Diss. Solids (TDS)*	31,414	mg/L	(An-Cat Sum.)	NA
Total Diss. Solids @ 180 °c	NA	mg/L	SM 2540 C	NA

Other	mg/L	meq/L	Method #.	MDL
Silica, as SiO2	124 .	17.8	EPA 200.7	0.01
Sodium, Na^{+1} (Calc.)	10,504 .	457	API RP 45	NA
Chloride, Cl^{-1} (Calc.)	15,857 .	447	API RP 45	NA

QC (Quality Control)	Results		Criteria	Limits
Meas EC - Calc EC =	0.8	*Note	(0.9 - 1.1) EC	>2500
TDS - EC Ratio =	0.75	**Note	(0.55 - 0.70)	>2500
Measured EC - Ion Sum =	1.2	Cation	(0.9 - 1.1) EC	
	1.2	Anion	(0.9 - 1.1) EC	
Calc. Na - Actual Na =	1.00	Na/Na	(0.98 - 1.02)	
NaCl/(NaCl Calc.) =	1.00	Na:Cl	(0.98 - 1.02)	

QC - Anion - Cation Balance Criteria

Anion Sum meq/L	meq/L SUM	Acceptable % Difference
0 - 3.0	NA	± 0.2 meq
3.0 - 10.0	NA	± 2 %
10.0 - 800	1025	± 2 - 5 %
Anion - Cation Balance =	-2.0	%

"The Quality of the Analysis is Only as Good as the Quality of the Sample"

Notes:

MDL - Method Detection Limit .

PQL - Practical Quantitation Limit - The lowest level that can be reliably achieved within specific limits of precision and accuracy of the analytical methodology (5X MDL).

N.D. - Not Detected (below PQL)
TDS* - Cation and anion sum..
NA - Not applicable to report.
∑ = Sum
** Dissociated ions may elevate this value (Ca^{+2}, $SO4^{-2}$ etc.)
X = Not Analyzed for
Calcium Carbonate Stability Index
(+) =CaCO3 will tend to precipitate.
(-) = CaCO3 will tend to dissolve.
(±) = CaCO3 is at equilibrium.

References:

1. APHA-AWWA; "Standard Methods for the Examination of Water and Waste Water," 18-20 th. Ed. 1992-98
2. ASTM; "Water," 2007 American Society for Testing and Material Vol. 11.01-02
3. EPA;"Methods for Chemical Anallysis of Water and Waste," 1983 EPA-600/4-73-020
4. API; "Analysis of Oil-Field Waters," 1981 2nd. Ed. American Petroleum Insitiute, API RP 45.
5. Patton, C.C.; "Applied Water Technology," 1986 Campbell Petroleum Series.

Comments:

Due to the presence of unmeasured constituents, some QC values may be out of normal range.

QC:_____ Date:_____

QC:_____ Date:_____

Kurt R. Buckle Laboratory Director — Midway Laboratory, Inc

Date:_____

Midway Laboratory, Inc.

LABORATORY REPORT

ELAP STATE CERT. #1396

CUSTOMER: General Production Services
ADDRESS: PO BOX 344
Taft, CA 93268

ATTENTION: Darin Jeffries

SAMPLE DESCRIPTION: Sump-WDR

SAMPLE MATRIX: Liquid

LOG NUMBER: 28731
DATE RECEIVED: 04-27-15
DATE COMPLETED: 05-14-15
REPORT DATE: 05-15-15

ANALYTICAL PARAMETER: Manganese (Mn)

Log Number	Sample Description	Manganese (Mn) (mg/L) PQL: 0.01	Method Number
28731	Sump-WDR	0.07	EPA 200.7

NOTES:

1) **PQL** = Practical Quantitation Limit is the lowest level that can be reliably achieved within specific limits of precision and accuracy. It also depends upon the size and digestion/analytical techniques employed.
2) **N.D.** = Not Detected
3) <> - Refers to "less than" or "Greater than" respectively.

REFERENCES:

1) ALPHA-AWWA-WPCF, "**Standard Methods for the Examination of Water and Wastewater**," 18th Edition.

2) EPA, **"Methods for Chemical Analysis of Water and Wastes,"** 1983 United States Environmental Protection Agency, EPA 600/4-79-020, Revised March 1983.

Q.C. _____ Date: _____

Q.C. _____ Date: _____

_____ **Date:** _____

Kurt R. Buckle – Laboratory Director - Midway Laboratory, Inc.

Midway Laboratory, Inc.
Petroleum-Industrial-Environmental
315 Main Street P.O. Box 1151
Taft California 93268
Phone (661) 765-2364 ♦ Fax (661) 765-6920 ♦ midwaylab@verison.net ♦ www.midwaylaboratory.com

Midway Laboratory, Inc.

LABORATORY REPORT

ELAP STATE CERT. #1396

Title 22 Article 3 – Characteristics of Hazardous Waste

CUSTOMER: General Production Services
PO BOX 344
Taft, CA 93268

LOG NUMBER: 28731
DATE RECEIVED: 04-27-15
DATE COMPLETED: 05-15-15
REPORT DATE: 05-15-15

ATTENTION: Darin Jeffries

SAMPLE DESCRIPTION: Sump-WDR

Sample Log #28731, Described as "Sump-WDR" was submitted for hazardous waste characterization as described under California Code of Regulations, Title 22, Article 3 § 66261.20.

Sample Log # 28731 was evaluated according to the following criteria utilizing EPA SW-846 methodology and related regulatory methodology.

Title 22 Article 3. Characteristics of Hazardous Waste

§ 66261.20. General.

(b) A waste which is identified as a hazardous waste pursuant to one or more of the characteristics set forth in section;

§ 66261.21 Characteristics of Ignitability. ***Not Requested***

§ 66261.22(a)(1) Characteristics of Corrosivity (Aqueous, dealing with pH 2-12.5). ***Not Requested***

§ 66261.23 Characteristics of Reactivity. (Explosives, sulfides-cyanides) ***Not Requested***

§ 66261.24(a)(1) Characteristic of Toxicity (TCLP-metals, organics, Table 1; WET extraction, STLC-TTLC CAM metals) ***Passed***

** § 66261.24(a)(6) Acute aquatic 96-hour LC50 (Fish Bioassay). ***Not Requested***

Under these guidelines, sample Log #28731 would be considered as Non Hazardous

** **Please Note:** This analysis was not performed by Midway Laboratory personnel and therefore Midway Laboratory is unable to verify the accuracy of these results.

Please note: Hazardous or non hazardous status under Characteristics of Hazardous Waste Title 22, Article 3 is only applicable to analysis that was completed. Any analysis listed as "Not Requested" is not included in the determination of Hazardous or Non Hazardous.

Q.C. _____ Date: _____

Q.C. _____ Date: _____

_____ **Date:** _____

Kurt Buckle - Laboratory Director **Midway Laboratory, Inc.**

Midway Laboratory, Inc.
315 Main Street ♦ P.O. Box 1151
Taft, CA 93268
Phone: 661-765-2364♦Fax: 661-765-6920♦Email: midwaylab@verizon.net♦www.midwaylaboratory.com

Oilfield Environmental and Compliance, INC.

Kurt Buckle
Midway Laboratory, Inc
315 Main Street
Taft, CA 93268

11 May 2015

RE: Midway Laboratory

Work Order: 1501825

Dear Client:

Enclosed is an analytical report for the above referenced project. The samples included in this report were received on 29-Apr-15 15:00 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Assurance Manual, applicable standard operating procedures, and other related documentation. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Marissa L. Censullo

Project Manager

807 Roemer Way, Suite 300, Santa Maria, CA 93454 www.oecusa.com TEL: (805) 922-4772 FAX: (805) 925-3376

Midway Laboratory, Inc	Project: Midway Laboratory	
315 Main Street	Project Number: 28731	**Reported:**
Taft CA, 93268	Project Manager: Kurt Buckle	11-May-15 12:19

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SUMP-WDR	1501825-01	Water	27-Apr-15 00:00	29-Apr-15 15:00

Midway Laboratory, Inc	Project: Midway Laboratory	
315 Main Street	Project Number: 28731	**Reported:**
Taft CA, 93268	Project Manager: Kurt Buckle	11-May-15 12:19

SUMP-WDR

1501825-01 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Oilfield Environmental and Compliance									
Total Metals by EPA 6000/7000 Series Methods									
Lithium	**33**	0.025	mg/L	1	B5D0907	30-Apr-15	30-Apr-15	EPA 6010B	
Strontium	**8.6**	0.010	"	"	"	"	"	"	
TVPH by GC FID									
TPH Gasoline (C4-C12)	**19000**	1000	ug/L	20	B5E0109	05-May-15	05-May-15	EPA 8015M	
Surrogate: 4-Bromofluorobenzene		*132 %*	*70-130*		"	"	"	"	*S-02*
EPH by GC FID									
TPH Diesel (C13-C22)	**110**	5.0	mg/L	50	B5E0008	01-May-15	04-May-15	EPA 8015M	
TPH Motor Oil (C23-C40)	**90**	10	"	"	"	"	"	"	
Surrogate: o-Terphenyl		*80.3 %*	*53-157*		"	"	"	"	
Volatile Organic Compounds by EPA Method 8260B									**R-05**
Benzene	ND	10	ug/L	20	B5E0045	04-May-15	04-May-15	EPA 8260B	
Ethylbenzene	**12**	10	"	"	"	"	"	"	
Toluene	ND	10	"	"	"	"	"	"	
Xylenes (total)	**23**	10	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*103 %*	*70-130*		"	"	"	"	
Surrogate: Toluene-d8		*113 %*	*70-130*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*102 %*	*70-130*		"	"	"	"	
Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring									**R-01**
Acenaphthene	**12**	1.0	ug/L	5	B5E0007	01-May-15	01-May-15	EPA 8270M SIM	
Acenaphthylene	ND	1.0	"	"	"	"	"	"	
Anthracene	ND	1.0	"	"	"	"	"	"	
Benz(a)anthracene	**1.1**	1.0	"	"	"	"	"	"	
Benzo (b) fluoranthene	**1.6**	1.0	"	"	"	"	"	"	
Benzo (k) fluoranthene	**2.4**	1.0	"	"	"	"	"	"	
Benzo (a) pyrene	**3.0**	1.0	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	1.0	"	"	"	"	"	"	
Chrysene	**7.0**	1.0	"	"	"	"	"	"	

Midway Laboratory, Inc	Project: Midway Laboratory	
315 Main Street	Project Number: 28731	**Reported:**
Taft CA, 93268	Project Manager: Kurt Buckle	11-May-15 12:19

SUMP-WDR

1501825-01 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring **R-01**

Dibenz (a,h) anthracene	ND	1.0	ug/L	5	B5E0007	01-May-15	01-May-15	EPA 8270M SIM	
Fluoranthene	ND	1.0	"	"	"	"	"	"	
Fluorene	**110**	10	"	50	"	"	05-May-15	"	
Indeno (1,2,3-cd) pyrene	ND	1.0	"	5	"	"	01-May-15	"	
Naphthalene	ND	1.0	"	"	"	"	"	"	
Phenanthrene	**190**	10	"	50	"	"	05-May-15	"	
Pyrene	ND	1.0	"	5	"	"	01-May-15	"	
Surrogate: p-Terphenyl-d14		*87.5 %*		*39-177*	"	"	"	"	

Midway Laboratory, Inc	Project: Midway Laboratory	
315 Main Street	Project Number: 28731	**Reported:**
Taft CA, 93268	Project Manager: Kurt Buckle	11-May-15 12:19

Total Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B5D0907 - EPA 3010A										
Blank (B5D0907-BLK1)				Prepared & Analyzed: 30-Apr-15						
Lithium	ND	0.025	mg/L							
Strontium	ND	0.010	"							
LCS (B5D0907-BS1)				Prepared & Analyzed: 30-Apr-15						
Lithium	2.33	0.025	mg/L	2.00		116	80-120			
Strontium	2.37	0.010	"	2.00		119	80-120			
LCS Dup (B5D0907-BSD1)				Prepared & Analyzed: 30-Apr-15						
Lithium	1.96	0.025	mg/L	2.00		97.8	80-120	17.5	20	
Strontium	1.98	0.010	"	2.00		98.8	80-120	18.1	20	
Duplicate (B5D0907-DUP1)	**Source: 1501825-01**			Prepared & Analyzed: 30-Apr-15						
Lithium	31.7	0.025	mg/L		33.5			5.43	20	
Strontium	8.32	0.010	"		8.57			2.96	20	
Matrix Spike (B5D0907-MS1)	**Source: 1501825-01**			Prepared & Analyzed: 30-Apr-15						
Lithium	35.5	0.025	mg/L	2.00	33.5	101	41-163			
Strontium	9.92	0.010	"	2.00	8.57	67.7	84-129			QM-4X

Midway Laboratory, Inc	Project: Midway Laboratory	
315 Main Street	Project Number: 28731	**Reported:**
Taft CA, 93268	Project Manager: Kurt Buckle	11-May-15 12:19

TVPH by GC FID - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B5E0109 - EPA 5030B VOCGC										
Blank (B5E0109-BLK1)				Prepared & Analyzed: 05-May-15						
TPH Gasoline (C4-C12)	ND	50	ug/L							
Surrogate: 4-Bromofluorobenzene	*119*		"	*125*		*95.2*	*70-130*			
LCS (B5E0109-BS1)				Prepared & Analyzed: 05-May-15						
TPH Gasoline (C4-C12)	476	50	ug/L	500		95.3	70-130			
Surrogate: 4-Bromofluorobenzene	*126*		"	*125*		*101*	*70-130*			
LCS Dup (B5E0109-BSD1)				Prepared & Analyzed: 05-May-15						
TPH Gasoline (C4-C12)	478	50	ug/L	500		95.6	70-130	0.322	20	
Surrogate: 4-Bromofluorobenzene	*123*		"	*125*		*98.1*	*70-130*			
Duplicate (B5E0109-DUP1)	**Source: 1501825-01**			Prepared & Analyzed: 05-May-15						
TPH Gasoline (C4-C12)	20000	1000	ug/L		18800			6.24	20	
Surrogate: 4-Bromofluorobenzene	*166*		"	*125*		*133*	*70-130*			*S-02*

Midway Laboratory, Inc	Project: Midway Laboratory	
315 Main Street	Project Number: 28731	**Reported:**
Taft CA, 93268	Project Manager: Kurt Buckle	11-May-15 12:19

TEPH by GC FID - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B5E0008 - EPA 3510C										
Blank (B5E0008-BLK1)				Prepared & Analyzed: 01-May-15						
TPH Diesel (C13-C22)	ND	0.050	mg/L							
TPH Motor Oil (C23-C40)	ND	0.10	"							
Surrogate: o-Terphenyl	*0.101*		"	*0.100*		*101*	*53-157*			
LCS (B5E0008-BS1)				Prepared & Analyzed: 01-May-15						
TPH Diesel (C13-C22)	0.714	0.050	mg/L	1.00		71.4	59-117			
Surrogate: o-Terphenyl	*0.109*		"	*0.100*		*109*	*53-157*			
LCS Dup (B5E0008-BSD1)				Prepared & Analyzed: 01-May-15						
TPH Diesel (C13-C22)	0.814	0.050	mg/L	1.00		81.4	59-117	13.2	20	
Surrogate: o-Terphenyl	*0.111*		"	*0.100*		*111*	*53-157*			

Midway Laboratory, Inc 315 Main Street Taft CA, 93268	Project: Midway Laboratory Project Number: 28731 Project Manager: Kurt Buckle	**Reported:** 11-May-15 12:19

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B5E0045 - EPA 5030B VOCGCMS										
Blank (B5E0045-BLK1)				Prepared & Analyzed: 04-May-15						
Benzene	ND	0.50	ug/L							
Ethylbenzene	ND	0.50	"							
Toluene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Surrogate: Dibromofluoromethane	*13.0*		"	*12.5*		*104*	*70-130*			
Surrogate: Toluene-d8	*12.8*		"	*12.5*		*102*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*12.2*		"	*12.5*		*97.5*	*70-130*			
LCS (B5E0045-BS1)				Prepared & Analyzed: 04-May-15						
Benzene	27.2	0.50	ug/L	25.0		109	70-130			
Toluene	25.9	0.50	"	25.0		104	70-130			
Surrogate: Dibromofluoromethane	*12.7*		"	*12.5*		*101*	*70-130*			
Surrogate: Toluene-d8	*12.7*		"	*12.5*		*101*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*12.3*		"	*12.5*		*98.3*	*70-130*			
LCS Dup (B5E0045-BSD1)				Prepared & Analyzed: 04-May-15						
Benzene	28.2	0.50	ug/L	25.0		113	70-130	3.61	20	
Toluene	26.8	0.50	"	25.0		107	70-130	3.30	20	
Surrogate: Dibromofluoromethane	*12.8*		"	*12.5*		*103*	*70-130*			
Surrogate: Toluene-d8	*12.6*		"	*12.5*		*101*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*12.1*		"	*12.5*		*96.7*	*70-130*			
Duplicate (B5E0045-DUP1)	**Source: 1501825-01**			Prepared & Analyzed: 04-May-15						
Benzene	6.00	10	ug/L		6.40			6.45	20	
Ethylbenzene	12.0	10	"		11.8			1.68	20	
Toluene	8.00	10	"		8.20			2.47	20	
Xylenes (total)	22.8	10	"		22.6			0.881	20	
Surrogate: Dibromofluoromethane	*12.2*		"	*12.5*		*97.4*	*70-130*			
Surrogate: Toluene-d8	*13.9*		"	*12.5*		*111*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*12.9*		"	*12.5*		*103*	*70-130*			

Midway Laboratory, Inc	Project: Midway Laboratory	
315 Main Street	Project Number: 28731	**Reported:**
Taft CA, 93268	Project Manager: Kurt Buckle	11-May-15 12:19

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B5E0045 - EPA 5030B VOCGCMS										
Matrix Spike (B5E0045-MS1)	**Source: 1501825-01**			Prepared & Analyzed: 04-May-15						
Benzene	556	10	ug/L	500	6.40	110	70-130			
Toluene	534	10	"	500	8.20	105	70-130			
Surrogate: Dibromofluoromethane	*240*		"	*250*		*96.2*	*70-130*			
Surrogate: Toluene-d8	*277*		"	*250*		*111*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*255*		"	*250*		*102*	*70-130*			
Matrix Spike Dup (B5E0045-MSD1)	**Source: 1501825-01**			Prepared & Analyzed: 04-May-15						
Benzene	548	10	ug/L	500	6.40	108	70-130	1.59	20	
Toluene	522	10	"	500	8.20	103	70-130	2.31	20	
Surrogate: Dibromofluoromethane	*241*		"	*250*		*96.2*	*70-130*			
Surrogate: Toluene-d8	*276*		"	*250*		*110*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*260*		"	*250*		*104*	*70-130*			

Midway Laboratory, Inc	Project: Midway Laboratory	
315 Main Street	Project Number: 28731	**Reported:**
Taft CA, 93268	Project Manager: Kurt Buckle	11-May-15 12:19

Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B5E0007 - EPA 3510C MS										
Blank (B5E0007-BLK1)				Prepared & Analyzed: 01-May-15						
Acenaphthene	ND	0.10	ug/L							
Acenaphthylene	ND	0.10	"							
Anthracene	ND	0.10	"							
Benz(a)anthracene	ND	0.10	"							
Benzo (b) fluoranthene	ND	0.10	"							
Benzo (k) fluoranthene	ND	0.10	"							
Benzo (a) pyrene	ND	0.10	"							
Benzo (g,h,i) perylene	ND	0.10	"							
Chrysene	ND	0.10	"							
Dibenz (a,h) anthracene	ND	0.10	"							
Fluoranthene	ND	0.10	"							
Fluorene	ND	0.10	"							
Indeno (1,2,3-cd) pyrene	ND	0.10	"							
Naphthalene	ND	0.10	"							
Phenanthrene	ND	0.10	"							
Pyrene	ND	0.10	"							
Surrogate: p-Terphenyl-d14	*1.19*		"	*0.800*		*149*	*39-177*			
LCS (B5E0007-BS1)				Prepared & Analyzed: 01-May-15						
Acenaphthene	0.690	0.10	ug/L	0.800		86.2	53-105			
Acenaphthylene	0.650	0.10	"	0.800		81.2	48-110			
Anthracene	0.770	0.10	"	0.800		96.2	54-120			
Benz(a)anthracene	0.740	0.10	"	0.800		92.5	46-131			
Benzo (b) fluoranthene	0.710	0.10	"	0.800		88.8	45-153			
Benzo (k) fluoranthene	1.02	0.10	"	0.800		128	63-154			
Benzo (a) pyrene	0.770	0.10	"	0.800		96.2	56-134			
Benzo (g,h,i) perylene	0.780	0.10	"	0.800		97.5	36-164			
Chrysene	0.990	0.10	"	0.800		124	72-125			
Dibenz (a,h) anthracene	1.04	0.10	"	0.800		130	44-154			
Fluoranthene	0.940	0.10	"	0.800		118	71-118			
Fluorene	0.650	0.10	"	0.800		81.2	45-122			
Indeno (1,2,3-cd) pyrene	0.930	0.10	"	0.800		116	40-155			
Naphthalene	0.580	0.10	"	0.800		72.5	49-99			
Phenanthrene	0.700	0.10	"	0.800		87.5	49-117			
Pyrene	0.950	0.10	"	0.800		119	71-119			
Surrogate: p-Terphenyl-d14	*1.00*		"	*0.800*		*125*	*39-177*			

Midway Laboratory, Inc 315 Main Street Taft CA, 93268	Project: Midway Laboratory Project Number: 28731 Project Manager: Kurt Buckle	**Reported:** 11-May-15 12:19

Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B5E0007 - EPA 3510C MS										
LCS Dup (B5E0007-BSD1)				Prepared & Analyzed: 01-May-15						
Acenaphthene	0.570	0.10	ug/L	0.800		71.2	53-105	19.0	30	
Acenaphthylene	0.550	0.10	"	0.800		68.8	48-110	16.7	30	
Anthracene	0.690	0.10	"	0.800		86.2	54-120	11.0	30	
Benz(a)anthracene	0.690	0.10	"	0.800		86.2	46-131	6.99	30	
Benzo (b) fluoranthene	0.640	0.10	"	0.800		80.0	45-153	10.4	30	
Benzo (k) fluoranthene	0.940	0.10	"	0.800		118	63-154	8.16	30	
Benzo (a) pyrene	0.650	0.10	"	0.800		81.2	56-134	16.9	30	
Benzo (g,h,i) perylene	0.750	0.10	"	0.800		93.8	36-164	3.92	30	
Chrysene	0.960	0.10	"	0.800		120	72-125	3.08	30	
Dibenz (a,h) anthracene	0.990	0.10	"	0.800		124	44-154	4.93	30	
Fluoranthene	0.890	0.10	"	0.800		111	71-118	5.46	30	
Fluorene	0.590	0.10	"	0.800		73.8	45-122	9.68	30	
Indeno (1,2,3-cd) pyrene	0.860	0.10	"	0.800		108	40-155	7.82	30	
Naphthalene	0.500	0.10	"	0.800		62.5	49-99	14.8	30	
Phenanthrene	0.640	0.10	"	0.800		80.0	49-117	8.96	30	
Pyrene	0.880	0.10	"	0.800		110	71-119	7.65	30	
Surrogate: p-Terphenyl-d14	*0.930*		"	*0.800*		*116*	*39-177*			

Midway Laboratory, Inc	Project: Midway Laboratory	
315 Main Street	Project Number: 28731	**Reported:**
Taft CA, 93268	Project Manager: Kurt Buckle	11-May-15 12:19

Notes and Definitions

S-02	The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.
R-05	The sample was diluted due to the presence of high levels of non-target analytes resulting in elevated reporting limits.
R-01	The Reporting Limit has been raised to account for matrix interference.
QM-4X	The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

DAVI LABORATORIES, ENVIRONMENTAL ASSOCIATES
730 Alfred Nobel Dr, Hercules, CA 94547

ANALYTICAL RESULTS REPORT

Company: Oilfield Environmental and Compliance
Address: 307 Roemer Way, Suite 300
Santa Maria, cA 93454

Project Manager: Marissa Censullo
Report Date: May 14, 2015
Subcontract Order #: 1501825

TABLE I

Sample ID	Collection Date/Time	Matrix	EPA Method	Analyses	Results pCi/L	± 2 Sigma error	MDA
1501825 -01		Oily Sludge Emulsion					
4/27/15 (0000)			9310	Gross Alpha	16.54	± 3.32	0.06
			9310	Gross Beta	11.99	± 2.10	1.56
			DOE U-04	Uranium	4.09	± 1.22	0.02
			9315	Radium 226	11.86	± 5.39	6.91
			9320	Radium 228	11.17	± 0.62	1.40

Sample is an oily emulsion

TABLE II QA/QC

Analyses	Spike Added	Detected Activity	% Agreement
Gross Alpha	407.00 pCi/L	409.52 pCi/L	100.62
Gross Beta	600.20 pCi/L	585.80 pCi/L	97.10
Uranium	256.02 pCi/L	252.00 pCi/L	98.43
Radium 226	2.56 pCi/L	2.55 pCi/L	99.60
Radium 228	600.12 pCi/L	582.77 pCi/L	97.11

Patricia Davi
Davi Laboratories
QA/QC Manager

AREA: ____

FREQUENCY

Midway Laboratory,

CHAIN OF CUSTODY FORM

LOG NUMBER: 28731

PAGE: OF

COMPANY: Midway Laboratory, Inc

CONTACT(S): Office Personnel (See

CONTACT(S):

PHONE: 661-765-2364 CELL: FAX: 661-765-6920

ADDRESS: P.O. Box 1151

Taft, CA 93268

EMAIL (S): midwaylab@verizon.net

EMAIL (S):

SAMPLER:

SAMPLER SIGNATURE REQUIRED ABOVE

ANALYSIS REQUESTED

PRESERVATIVE LIST

Please indicate preservative treated using the corresponding letter at the left of the list.

A HCl - Hydrolic Acid
B H2SO4 - Sulfuric Acid
C HNO3 - Nitric Acid
D NaOH - Sodium Hydroxide
E Na2S2O3 - Sodium Thiosulfate
F Zn Acetate + Zinc Acetate
G O - Other (Please specify in comments)

SAMPLE CONDITION

AT TIME OF ARRIVAL IN THE LAB PLEASE CIRCLE THE APPROPRIATE BOXES BELOW:

SAME DAY SAMPLING
COOL
RECEIVED ON ICE
WARM
ROOM TEMPERATURE

PLEASE LIST ANY PM /PO NUMBERS OR COST CODES:

TEMPERATURE MUST BE TAKEN FOR ALL DRINKING WATER SAMPLES UPON ARRIVAL IN THE LAB. THESE ARE TAKEN WITH THE TEMP GUN.

LAB #	SAMPLE DESCRIPTION	LOCATION FACILITY	SAMPLE DATE	SAMPLE TIME	METER #	8015	PAH	Radionuclide	lithium	Strontium	BTEX	NUMBER OF CONTAINERS	TYPE OF CONTAINERS (SEE LIST)	SAMPLE MATRIX (SEE LIST)	PRESERVATIVES REQUIRED (SEE LIST)	TEMPERATURE Temp	TEMPERATURE UOM	PRESSURE Pressure	PRESSURE UOM	TEMP.
	Sump - WDR		4-27-15			X	X	X	X	X	X	10		L		150	82S	IA-J		

CONTAINER TYPES

G= GLASS
AG= AMBER GLASS
M= METAL
MC= METAL CYLINDER
P= PLASTIC
SY= SYRINGE
T= TEDLAR
TC= TEFLON COATED
O= OTHER

SAMPLE MATRIX

G= GAS
L= LIQUID
LNG= LIQUEFIED NATURAL GAS
LPG= LIQUEFIED PETROLEUM GAS
O= OIL
S= SOIL
SLD= SOLID
SL= SLUDGE
DW= DRINKING WATER
W= WATER

SAMPLING

Start Time:

Total Sample Time: HOURS

Total Mileage: MILES

CHAIN OF CUSTODY SIGNATURE RECORD

		DATE	TIME
1.	RELINQUISHED BY	4/29/15	12:00
1.	RECEIVED BY	4/29/15	12:25
1.	RELINQUISHED BY	4/29/15	3:60
1.	RECEIVED BY	4-29-15	1500

INSTRUCTIONS FOR OUTLABBING ANALYSIS:

- ALL outlabbed analysis must include the method numbers for requested analysis.
- ALL drinking water samples must include Source Numbers, Sampler's Name.
- Laboratory must be aware that analysis is to be reported to the State.

IS SAMPLE A RESAMPLE? PLEASE STATE YES OF NO:

ORGINAL LOG NUMBER:

IS SAMPLE A REVISED PLEASE STATE YES OF NO:

COMMENTS:

3-32 oz poly unpres.
1-Liter amber unpres.
1-16 oz poly pres w/ HNO_3
5-voa's Preserved w/ HCl

THIS SPACE RESERVED FOR LABORATORY USE ONLY

Midway Laboratory, Inc.

Alan J. Harris - President/Owner

Phone: 661-765-2364 ♦ Fax: 661-765-6920 ♦ Email: midwaylab@verizon.net ♦ State Certification Number: 1396 ♦ www.midwaylaboratory.com

SAMPLE RECEIPT

Rev. 01/15/10

CLIENT: Midway OEC ID #: 1501825 Temp: 7.4 °C

Acceptable Range: 0°C to 6°C

COC RECEIVED DATE/TIME: 04/29/15 1500

RECEIPT LOGIN DATE/TIME: 04/29/15 1517

REFRIGERATOR(s): 8, DAVI

SAMPLE TRANSPORT, RECEIPT, CONDITION & PRESERVATION:		Yes	No	N/A	(*) PROBLEM CHAIN FORM NEEDED
☒ OEC Courier/Sampler	COC document(s) received with samples	☒	☐*	☐	Custody Seals (circle): Present / Absent
☐ Delivery(Other than OEC Courier)	Correct containers for analysis requested	☒	☐*	☐	Samples / Coolers
☒ Samples Received on Ice	Container(s) intact and in good condition	☒	☐*	☐	Intact / Broken*
☒ Samples Received Outside Temp. Range*	Container label(s) consistent with COC	☒	☐*	☐	Method of Shipment & Tracking #(if applicable):
☐ Samples Direct from field (Outside Temp)	OEC preservative added (**note std ID)	☒**	☐	☐	P.P. 250mL POLY w/HNO3 LOT:050770 CONC. HNO3 ID: 4090185
☐ After-Hours Outside Drop-off [Brought Inside]	Proper preservation on sample label(s)	☒ (MJ)	☒	☐	(**) OEC Preservative ID:
(Initials/Date/Time):	VOA containers free of headspace	☐	☒*	☐	Dissolved Metals Filtration: (Date/Init/Preserve ID)
	Tedlar Bags free of condensation	☐	☐*	☒	

CONTAINERS, COC CHANGES AND/OR CORRECTIONS CHANGES AUTHORIZED BY:

OEC ID	Client ID ***If blank, refer to CoC	Container Description	Preservative	ResCl /pH	Matrix	Date/Time Sampled ***	Comments / Remarks / Condition Notes, Etc.
1A		1-1LAMBER	—	—	W		8
1B		1-500mL POLY	HNO_3	<2	↓		8
1C-E		3-1L POLYS	—	—	↓		DAVI LABS (1C, 1D)
1F-J		5-40mL VOAS	HCl	—	W		8
1K		1-250mL POLY	**HNO_3	<2	W		DAVI LABS

RECEIPT LOGIN BY: ELH RECEIPT REVIEWED BY: [signature]

PROBLEM CHAIN

CLIENT: Midway

OEC ID #: 1501825

ISSUES RECORDED BY (DATE/TIME/INITIALS): 04/29/15 @ 1529 EA

ISSUE(S): PLEASE PROVIDE DETAILS OF ISSUE(S) BELOW – Samples/Containers Affected, as necessary.

(3) ☒ Samples Received Outside Temp. Range (see below) ☐ NO COC document(s) received with samples ☐ Container(s) NOT intact or in good condition

☐ Incorrect containers for analysis requested ☐ Container label(s) NOT consistent with COC ☐ Custody Seals Broken

☒ OTHER: (if multiple, identify with numbers)

(1) VOAs 1G & 1J HAVE HEADSPACE.

(2) NEED 250 mL POLY w/ HNO_3 FOR SUBOUT TO DAVI LABS.

(3) REASON UNKNOWN.

RESOLUTIONS: MINIMUM INFO: Issue#[if necessary] – Description – Contact Type (Verbal, email, etc.) – Client Authorization Contact – Date/Time/Initials

(1) MARKED VOAs w/ "X" TO NOTIFY ANALYST.

(2) POURED OFF SAMPLE INTO 250 mL POLY PREPRESERVED w/ HNO_3 LOT: 050770 TO BRING pH TO <2. LABELED CONTAINER 1K. HAD TO ADD ADDITIONAL ACID TO CONTAINER TO DROP pH TO <2. pH WAS 7 AFTER POURING OFF INTO NEW PREPRESERVED CONTAINER. ADDED 2.0 mL CONCENTRATED HNO_3 ID: 4090185.

FINAL RESOLUTION OF ISSUES BY (DATE/TIME/INITIALS): 04/29/15 @ 1540 EA

09/09/08

Midway Laboratory, Inc.

LABORATORY REPORT

ELAP STATE CERT. #1396

CUSTOMER: General Production Services
ADDRESS: PO BOX 344
Taft, CA 93268
ATTENTION: Darin Jeffries

LOG NUMBER: 28731
DATE RECEIVED: 04-27-15
DATE COMPLETED: 05-01-15
REPORT DATE: 05-15-15

SAMPLE DESCRIPTION: Sump WDR

ANALYTICAL PARAMETER: Total Dissolved Solids @ 105˚C

Log Number	Sample Description	Sample Date	TDS	Method Number
28731	Sump WDR	04-27-15	30,000 (mg/L)	SM 2540 C

NOTES:

1) **PQL** = Practical Quantitation Limit is the lowest level that can be reliably achieved within specific limits of precision and accuracy. It also depends upon the size and digestion/analytical techniques employed.

2) **N.D.** = Not Detected

REFERENCES:

1) ALPHA-AWWA-WPCF, "**Standard Methods for the Examination of Water and Wastewater**," 18th Edition.

2) EPA, **"Methods for Chemical Analysis of Water and Wastes,"** 1983 United States Environmental Protection Agency, EPA 600/4-79-020, Revised March 1983.

Q.C. _____ Date: _____

Q.C. _____ Date: _____

_____ **Date:** _____

Kurt R.Buckle – Laboratory Director **Midway Laboratory, Inc.**